## **CLAIMS**

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- 1. A process for analysing a biological sample, comprising the steps of: (a) identifying a micro-organism present within the sample; and (b) determining the effect of one or more antimicrobial(s) on a micro-organism from the sample, wherein steps (a) and (b) are performed by analysing the micro-organism's nucleic acid.
- 2. The process of claim 1, wherein step (a) involves a nucleic acid hybridisation assay.
- 3. The process of claim 1 or claim 2, wherein step (b) involves a nucleic acid hybridisation assay.
- 4. The process of any preceding claim, wherein step (a) and/or step (b) involves amplification of nucleic acid from the micro-organism.
- 10 5. The process of claim 4, wherein nucleic acid amplification uses the polymerase chain reaction.
  - 6. The process of claim 4 or claim 5, wherein nucleic acid amplification uses primers which are specific to a micro-organism of interest.
  - 7. The process of any preceding claim, wherein the micro-organism's DNA is analysed.
  - 8. The process of any preceding claim, wherein the micro-organism's RNA is analysed.
- 15 9. The process of claim 7 or claim 8, wherein said DNA or RNA is a rRNA or rDNA.
  - 10. The process of any preceding claim, wherein micro-organisms are extracted from the sample prior to step (a).
  - 11. The process of claim 10, wherein micro-organisms are extracted by immunomagnetic separation.
- 12. The process of any preceding claim, wherein the antimicrobial(s) used in step (b) are selected 20 based on the results of step (a).
  - 13. The process of any preceding claim, wherein step (b) involves a comparison with data obtained in step (a).
  - 14. The process of any preceding claim, wherein the micro-organism is a bacterium, a fungus, a parasite or a virus.
- 25 15. The process of any preceding claim, wherein the antimicrobial is an antibiotic, an antimycotic or an antiviral.